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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/707,102	11/20/2003	Liou Liang Horng	718673.2	1101
27128	7590	11/27/2006	EXAMINER	
BLACKWELL SANDERS PEPER MARTIN LLP			MERCIER, MELISSA S	
720 OLIVE STREET			ART UNIT	
SUITE 2400			PAPER NUMBER	
ST. LOUIS, MO 63101			1615	

DATE MAILED: 11/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Application No.

10/707,102

<b>Applicant(s)</b>

HORNG, LIOU LIANG

**Examiner**

**Melissa S. Mercier**

## Art Unit

1615

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_\_.  
 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-109 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-109 are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Election/Restrictions*

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-91, and 101-106 drawn to a composition comprising a hydrogel formed by a mixture of two or more of:
  1. a non-acidic poly(N-vinyl lactam) with a K value of at least 30
  2. a water soluble multifunctional amine-containing polymer, and mixtures thereof, or
  3. a chitosan derivative or mixtures thereof, classified in class 424, subclass 484.
- II. Claim 92- 98, drawn to a method of treating a dental dry socket classified in class 424, subclass 70.17.
- III. Claims 99-100 and 107-109, drawn to a finished product comprising a hydro gel, classified in class 424, subclass 401 (cosmetic) or 49 (dental).

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of

using that product. See MPEP § 806.05(h). In the instant case dry socket is routinely treated by the use of medicated gauze, resorbable gel-foam or surgical packing that is changed every few days.

Inventions I and III are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product, and the species are patentably distinct (MPEP § 806.05(j)). In the instant case, the intermediate product is can be loaded with liposomal therapeutic agents such as antibodies which are covalently bonded to the surface of substrates, as disclosed by DiCosmo et al in US Patent 6,132,765, and the inventions are deemed patentably distinct because there is nothing on this record to show them to be obvious variants.

Inventions II and III are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different designs, modes of operation, and effects (MPEP § 802.01 and § 806.06). In the instant case, the different inventions have materially different designs and modes of operation. Invention II is disclosed as a method of treating a condition, whereas, Invention III is disclosed as a hydro gel in a packaging configuration.

Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction is not required because the inventions require a different field of search (see MPEP § 808.02), restriction for examination purposes as indicated is proper.

If Invention I is elected, applicant is further required to select one species selected from:

- a. an aqueous solution comprising non-acid polyvinylpyrrolidone and glycerin with an aqueous solution comprising carboxymethyl chitosan, glycerin, and polyethyleneimine
- b. a mixture of non-acidic poly(N-vinyl lactam) and a water soluble multifunctional amine-containing polymer
- c. a non-acidic polyvinylpyrrolidone, lidocaine hydrogen chloride and glutaric dialdehyde and an aqueous solution comprising polyethyleneimine, glycerin, and polyvinylpyrrolidone/dimethylaminoethylmethacrylate copolymer
- d. an aqueous solution comprising non-acidic polyvinylpyrrolidone, polyethylene glycol, benzocaine, and glutaric dialdehyde with an aqueous solution comprising polyethylene glycol, glycerin, and benzocaine, polyvinylpyrrolidone/dimethylaminoethylmethacrylate copolymer and polyethyleneimine
- e. a mixture of a non-acidic poly(N-vinyl lactam) with a K value of at least 30 and a chitosan derivative or mixture thereof.

If Inventions II or III is elected, applicant is further required to select one combination of:

- a. a non-acidic poly(N-vinyl lactam) with a K value of at least 30
- b. a water soluble multifunctional amine-containing polymer and mixtures thereof
- c. a chitosan derivative

The species are independent or distinct because they have materially different designs.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, Claim 1 is generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species.


MPEP § 809.02(a).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melissa S. Mercier whose telephone number is (571) 272-9039. The examiner can normally be reached on 7:30am-4pm Mon through Friday.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward can be reached on (571) 272-8373. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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